

Installation Instructions

hp StorageWorks NAS 2000s and 4000s



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Printed in the U.S.A.

HP StorageWorks NAS 2000s and 4000s Installation Instructions
Second Edition (September 2003)
Part Number: 345648-002



345648-002

About this Document

This document gives detailed instruction on the installation of the HP StorageWorks NAS 2000s or 4000s into HP-branded racks and third party racks. It provides the following installation information:

- Selecting a Site
- Rack Planning Resources
- Identifying the Server Shipping Carton Contents
- Installing Options
- Installing the Server into the Rack
- Server Description
- Optional External Storage Enclose
- Powering Up and Configuring the Server
- Registering the Server

For more information on the server, refer to the QuickSpecs at www.hp.com.

Selecting a Site

Select an installation site that meets the following requirements:

- Space
- Temperature
- Power
- Rack
- Grounding
- Airflow

Rack Planning Resources

The rack resource kit ships with all HP-branded racks. If you intend to deploy and configure multiple servers in a single rack, refer to the white paper on high-density deployment in HP-branded racks at www.hp.com.

Identifying the Server Shipping Carton Contents

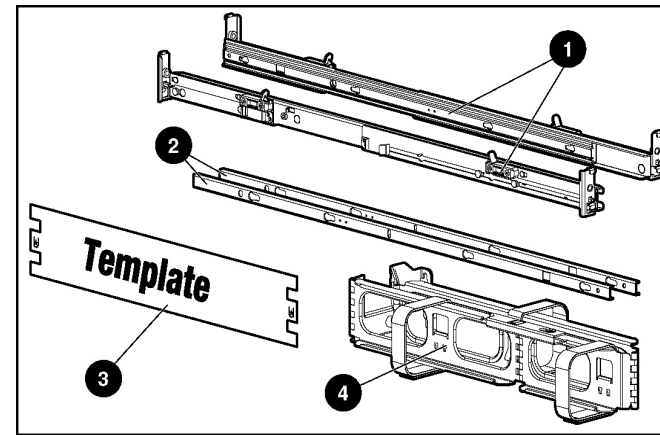
Unpack the server shipping carton and locate the materials and documentation necessary for installing the server. All the rack-mounting hardware necessary for installing the server into the rack is included with the rack or the server.

The contents of the server shipping carton include:

- Server
- Printed setup documentation and software products
- Power cord
- Rack-mounting hardware

In addition to these supplied items, you may need:

- Application software diskettes
- Options to be installed



- 1 Left and right standard rack rail assemblies
- 2 Server rails
- 3 Rack template
- 4 Cable management arm

Installing Option

Install any hardware options before initializing the server. For options installation information, refer to the option documentation. For server-specific information, refer to the Supplemental Setup booklet.

Installing the Server into the Rack

Follow the steps in this section if you are installing the server into a HP-branded rack or a third-party rack with square holes. If you are installing the server into a rack with round holes, order the appropriate rack installation option kit, and then refer to the installation instructions that ship with the option kit for more information.

Note: The steps in this section work with most third-party racks with square holes. If they do not work with the rack you are using, order the option kit for racks with round holes.

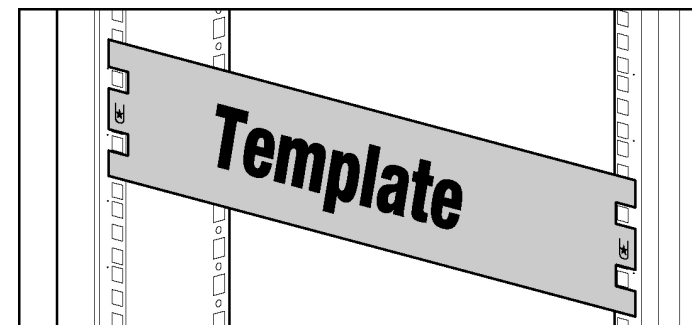
If you are installing the server into a Telco rack, order the appropriate option kit at www.racksolutions.com/hp.

Follow the server-specific instructions on the website to install the rack brackets.

After installing the brackets, follow the steps in this section.



WARNING: When installing a server in a Telco rack, be sure that the rack frame is adequately secured to the top and bottom of the building structure.

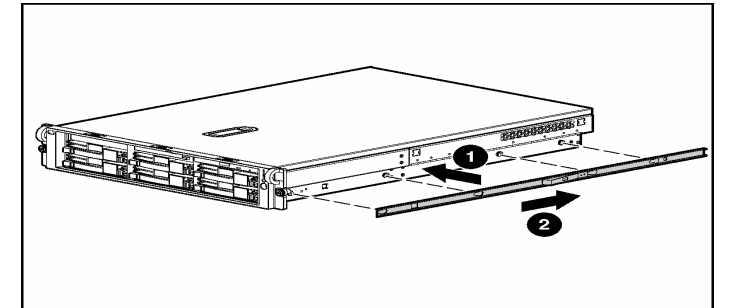


1. Mark the rack.

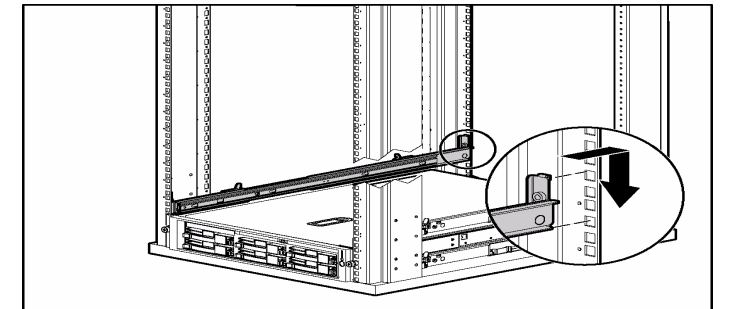


Caution: Always plan the rack installation so that the heaviest item is on the bottom of the rack. Install the heaviest item first, and continue to populate the rack from the bottom to the top.

Note: Rack components are removed for clarity.



2. Secure each server rail to the server.



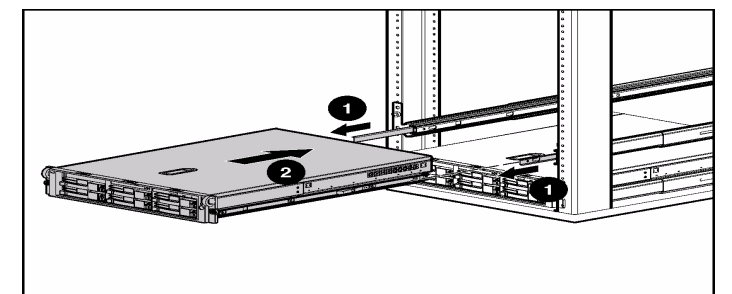
3. Secure the left and right standard rack rails to the appropriate side of the rack.



WARNING: To reduce the risk of personal injury or equipment damage, be sure that the rack is adequately stabilized before sliding the server rails into the rack rails.

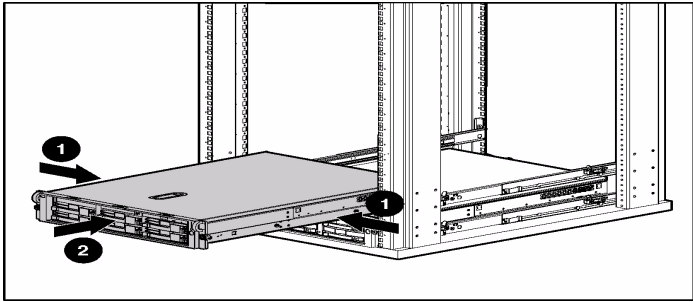


Caution: Be sure to keep the server parallel to the floor when sliding the server rails into the rack rails. Tilting the server up or down could result in damage to the rails.



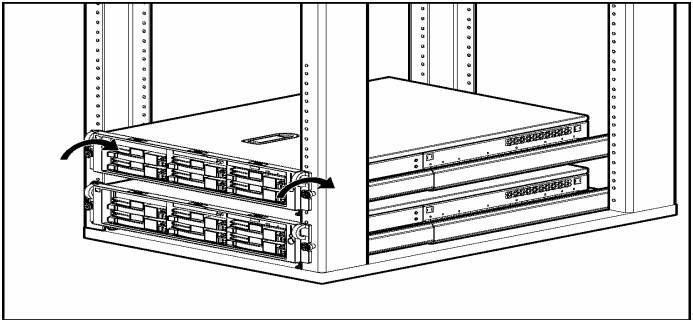
4. Extend the slides from the standard rack rails, and then slide the server rails into the slides.

See other side

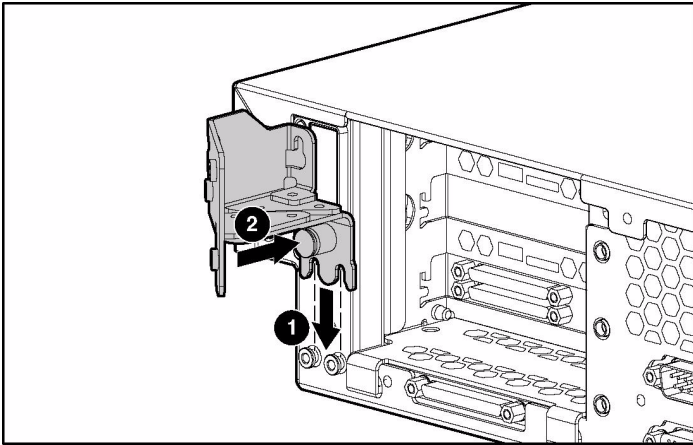


5. Press the rail-release latches and slide the server into the rack.

WARNING: To reduce the risk of personal injury, be careful when pressing the server rail-release latches and sliding the server into the rack. The sliding rails could pinch your fingers.

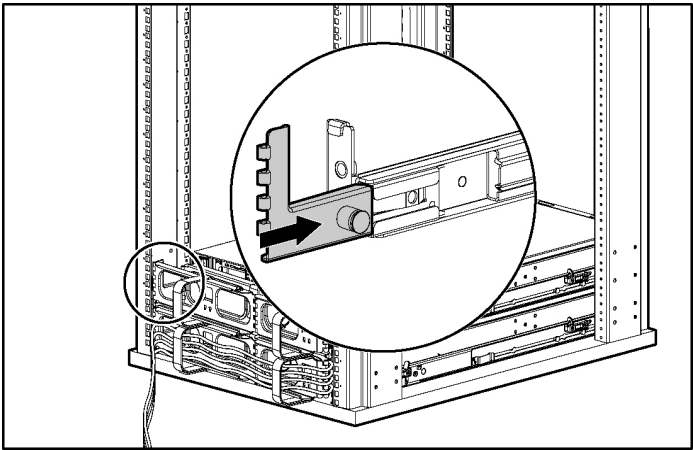


6. Secure the server to the rack.



7. Secure the cable management arm bracket to the server.

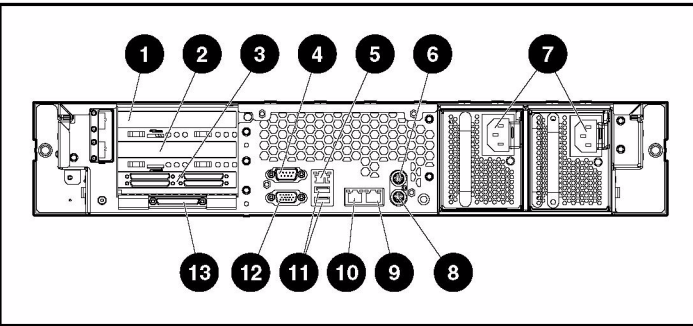
Note: Cable management arm is removed for clarity.



8. Secure the cable management bracket to the rail.

9. Connect peripheral devices to the server.

WARNING: To reduce the risk of electric shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into RJ-45 connectors.

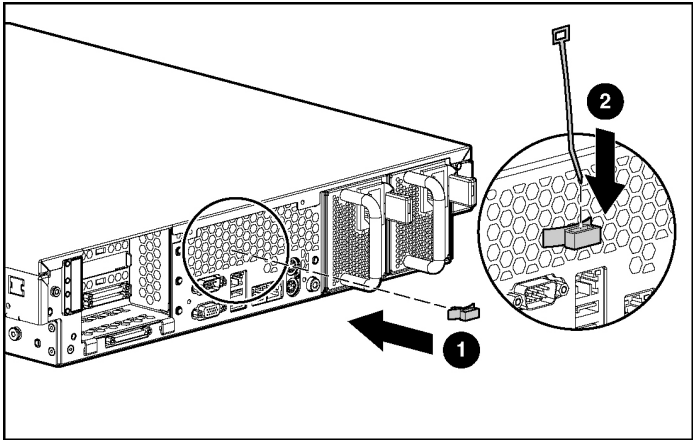


Item	Description	Connector color
1	Hot-plug PCI-X expansion slot 3 (bus 6) 64 bit/100MHz 3.3V	N/A
2	Hot-plug PCI-X expansion slot 2 (bus 6) 64 bit/100MHz 3.3V	N/A
3	Smart Array 6404 ¹	N/A
4	Serial connector	Teal
5	iLO connector	N/A
6	Mouse connector	Green
7	Redundant power supplies	N/A
8	Keyboard connector	Purple
9	NIC 1 connector	N/A
10	NIC 2 connector	N/A
11	USB connectors	N/A
12	Video connector	Blue
13	VHDCI SCSI connector (port 1)	N/A

¹The 6404 is only supported on the NAS 2000s and is only included with the NAS 2000s external SCSI model.

10. Connect the power cord to the back of the server.

11. If you chose not to install the cable management arm, install the power cord anchor.



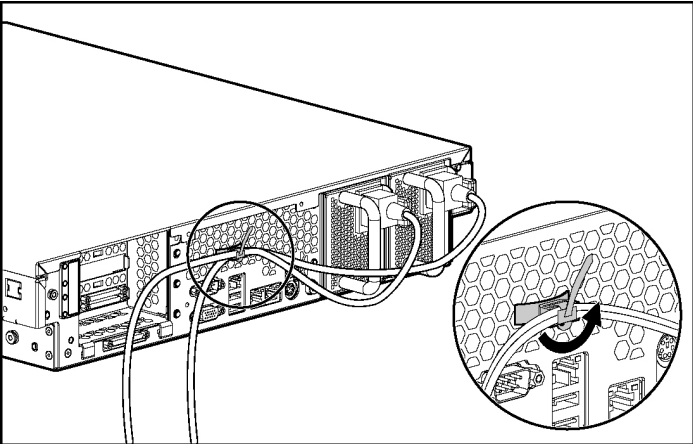
a. Secure the power cord anchor to the server, and then insert the tie wrap into the groove on the power cord anchor.

Note: Peripheral device cables are removed for clarity.

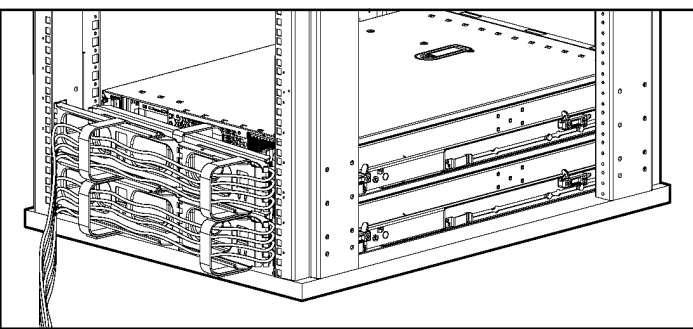
b. Place the power cord across the tie wrap at the following locations:

- 21.59 cm (8.5 inches) from the end of the redundant power supply cord
- 27.94 cm (11 inches) from the end of the primary power supply cord

Note: If using the power cord anchor, be sure to leave enough slack in the power cord so that the redundant power supply can be removed without disconnecting the power cord from the primary power supply.



c. Secure the tie wrap around the power cord to prevent accidental disengagement.



12. Secure cables to the cable management arm.

13. Connect the power cord to the AC power source.

WARNING: To reduce the risk of electric shock or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) electric outlet that is easily accessible at all times
- Unplug the power cord from the power supply to disconnect power to the equipment
- Do not route the power cord where it can be walked on or pinched by items placed against it. Pay particular attention to the plug, electric outlet, and the point where the cord extends from the server.

Optional External Storage Enclosure

The NAS 2000s external SCSI model ships with an HP StorageWorks 4414 Storage Enclosure that must also be installed in the rack. Please refer to the rack install poster included with the enclosure.

Powering Up and Configuring the Server

The NAS 2000s is preloaded with the NAS OS. Prior to power up, deployment instructions found in the Installation Guide should be followed to enable the successful configuration of the NAS device in addition to the guidelines found below.

To begin the first-time startup procedure:

1. Be sure that the server is safely installed in an adequate environment.
2. Be sure that the power cables and peripheral devices are plugged in and that adequate AC power is supplied to the server and storage.
3. Refer to the Installation Guide prior to powering up the device.

Registering the Server

Register the server at www.hp.com.